

Work Order ID 88027 -2

88027

Page 1

July-24-12 7:57:43 AM

Item ID: D3414-041

Accept

N9000040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Lug Assembly

Start Date: 7/24/12

Start Qty: 20.00

20

Cust Item ID:

Required Date: 8/03/12

Req'd Qty: 20.00

20

Customer:

Reference:

Run Start

NR1

Approvals:

Process Plan: MLJ

Date: 12/07/24

Tooling:

Date:

Stop

NR2

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Cod2

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3414

Rev C

0.00

100

100

Waterjet

FLOW CNC Waterjet

304 .100

Memo

0.00

1-Cut as per Dwg D3414-1

Dwg Rev: C

Prog Rev: C

2-Deburr if necessary

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Quality Control

Memo

0.00

22

0

Jm 12-8-1

22

0

Jm 12-8-1

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

| | | | | | | | | | | | |
|---|------|------|-----|---|-------------------|---|-------------|---|--------------|--|--|
| Work Order: _____ Part No. _____ NCR No. _____ | | | | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | | AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div> | | | | | |
| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector | | |
| Doc/Data | | | | | | | | | | | |
| Equip/Tooling | | | | | | | | | | | |
| Operator | | | | | | | | | | | |
| Material | | | | | | | | | | | |
| Setup | | | | | | | | | | | |
| Other | | | | | | | | | | | |
| Process | | | | | | | | | | | |
| Supplier | | | | | | | | | | | |
| Training | | | | | | | | | | | |
| Unapproved | | | | | | | | | | | |
| FAULT CATEGORY | | | | | | | | | | | |
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | | | | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | | | | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions | | | |
| | | | | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge | | | | <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other | | | |

Work Order ID 88027

July-24-12 7:57:43 AM

88027

Page 2

Item ID: D3414-041 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Lug Assembly
 Start Date: 7/24/12 Start Qty: 20.00 ***20*** Cust Item ID:
 Required Date: 8/03/12 Req'd Qty: 20.00 ***20*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***


| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|--|--------------------------------|-----------------------|--------|--------------|---------------|---------------|------------------|----------------|
| 120 *120* QC Quality Control | QC8- Inspect parts - second check Memo | 0.00 SMB 12-8-02 0.00 | DAS 16 12/08/15 | | | 22 Carter | | | |
| 130 *130* Brake NC Brake NC | Memo 1-Deburr 2-Form using DT8254 as per Dwg D3414 | 0.00 0.00 | | | | 22 | | | SA 12/08/15 |
| 140 *140* Large Fab Large Fab | Memo 1- Weld using location Jig DT9625 as per Dwg D3414 A/R S.S. welding rod Batch: <u>M120013</u> | 0.00 0.00 | | | | 20 | | 22 | 12-8-28 |

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

| | | | | | | | | | | | |
|---|------|------|---|---|-------------------|---|-------------|--------------|---|--|--|
| Work Order: _____ Part No. _____ NCR No. _____ | | | | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | | AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div> | | | | | |
| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector | | |
| Doc/Data | | | |  | | | | | | | |
| Equip/Tooling | | | | | | | | | | | |
| Operator | | | | | | | | | | | |
| Material | | | | | | | | | | | |
| Setup | | | | | | | | | | | |
| Other | | | | | | | | | | | |
| Process | | | | | | | | | | | |
| Supplier | | | | | | | | | | | |
| Training | | | | | | | | | | | |
| Unapproved | | | | | | | | | | | |
| FAULT CATEGORY | | | | | | | | | | | |
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | | | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | | | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions | | | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other | | |

Work Order ID 88027

July-24-12 7:57:43 AM

88027

Page 3

Item ID: D3414-041

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Lug Assembly

Start Date: 7/24/12 Start Qty: 20.00

20

Cust Item ID:

Required Date: 8/03/12 Req'd Qty: 20.00

20

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150

QC9- Inspect visual per QSI004- Fusion Welds

0.00

150

QC

Memo

0.00

Quality Control

160

QC5- Inspect part completeness to step on W/O

0.00

160

QC

Memo

0.00

Quality Control

170

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

170

Powdercoat

Memo

0.00

Powder Coating

START TIME: _____

OVEN TEMPERATURE: _____

FINISH TIME: _____

mf
12-12-07

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

| | | | | | | | | | | | | | | | | | | |
|--|---|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____ Part No. _____ NCR No. _____ | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | |
| Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | | | | | | | | | | | | | | | | |

| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Operator | | | | | | | | | |
| Material | | | | | | | | | |
| Setup | | | | | | | | | |
| Other | | | | | | | | | |
| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

| | | |
|---|---|--|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other |
|---|---|--|

Work Order ID 88027

July-24-12 7:57:43 AM

88027

Page 4

Item ID: D3414-041 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Lug Assembly
 Start Date: 7/24/12 Start Qty: 20.00 ***20*** Cust Item ID:
 Required Date: 8/03/12 Req'd Qty: 20.00 ***20*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|---|--|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 180 *180* QC Quality Control | QC3- Inspect Part Finish <i>A mlt</i> Memo | 0.00 <i>12-12-07</i> 0.00 <i>WAOU</i> | | | | | | | |
| 190 *190* Packaging Packaging | Identify as per dwg & Stock Location: Memo | 0.00 0.00 | | | | | | | |
| 200 *200* QC Quality Control | QC21- Final Inspection - Work Order Release Memo | 0.00 0.00 | | | | | | | |

12/12/10
10 & stock as
D3414-1x2
w/o costed
mlt
12-12-07

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

| | | | | | |
|-------------------|---|--|------------------------------------|--|--------------------------------------|
| Work Order: _____ | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS | | | |
| Part No. _____ | | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> |
| NCR No. _____ | | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> |
| | | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> |
| | | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | |

| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Operator | | | | | | | | | |
| Material | | | | | | | | | |
| Setup | | | | | | | | | |
| Other | | | | | | | | | |
| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

| | | | | |
|---|---|---|--|---|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge | <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other |
|---|---|---|--|---|

Picklist Print

July-24-12 7:57:43 AM

Page 1

Work Order ID: 88027
 Parent Item: D3414-041
 Parent Item Name: Lug Assembly

Start Date: 7/24/12 Required Date: 8/03/12
 Start Qty: 20.00 Required Qty: 20.00

Comments: IPP A05.09.13New issueKJ/JLM

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|

M304S12GA
 304/316 0.100" Sheet

Purchased No

100 sf 97.3700 0.155 3.1

Jul 12-8-1

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| MAT019 | 97.37 | |
| 113062 | 83.24 | |
| 113077 | 14.13 | |

28

113062

D3414-3
 Lug

Manufactured No

140 Each 24.0000

1 20 12-8-28

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| WA | 20 | |
| 83878 | 20 | |
| WA030 | 4 | |
| 76228 | 4 | |

20

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

| | | | | | |
|-------------------|---|--|------------------------------------|--|--------------------------------------|
| Work Order: _____ | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS | | | |
| Part No. _____ | | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> |
| NCR No. _____ | | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> |
| | | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> |
| | | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | |

| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Operator | | | | | | | | | |
| Material | | | | | | | | | |
| Setup | | | | | | | | | |
| Other | | | | | | | | | |
| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

| | | | | |
|---|---|---|--|--|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge | <input type="checkbox"/> Pressure/Force <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other |
|---|---|---|--|--|

| | | | |
|--------------------------|--------|--------------|---------|
| DART AEROSPACE LTD | | Work Order: | 08027 |
| Description: Lug Bracket | | Part Number: | D3414-1 |
| Inspection Dwg: D3414 | Rev: C | Page 1 of 1 | |

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☒ Prototype

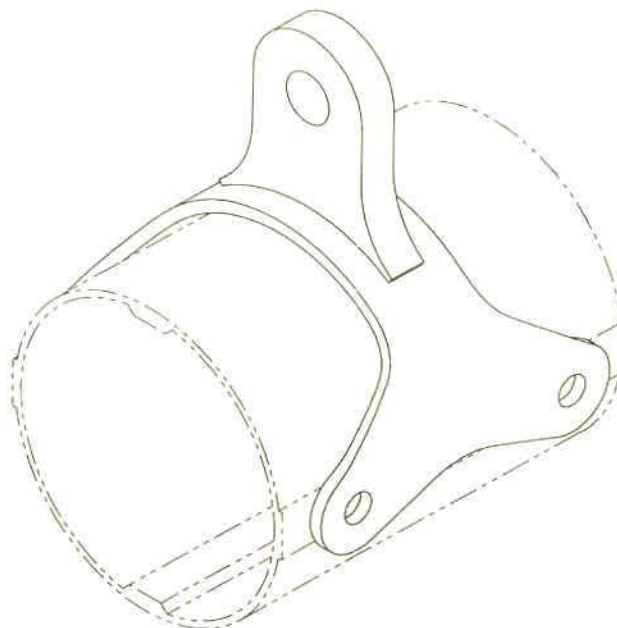
| Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|-------------------|---------------|------------------|--------|--------|----------------------|----------|
| Ø0.313 | +0.006/-0.001 | 0.315" | ✓ | | ✓ | mm01 |
| 1.19 | +/-0.030 | 1.181" | ✓ | | ✓ | " |
| 1.00 | +/-0.030 | 1.012" | ✓ | | ✓ | " |
| 3.38 | +/-0.030 | 3.376" | ✓ | | ✓ | " |
| 5.350 | +/-0.010 | 5.354" | ✓ | | ✓ | " |
| 6.23 | +/-0.030 | 6.226" | ✓ | | ✓ | " |
| 2.500 | +/-0.010 | 2.500" | ✓ | | ✓ | " |
| 0.37 | +/-0.030 | 0.364" | ✓ | | ✓ | " |
| 0.100 | +/-0.010 | 0.103" | ✓ | | ✓ | " |
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| Measured by: Jm | Audited by: SMB | Prototype Approval: | N/A |
| Date: 12-8-1 | Date: 12-8-02 | Date: | N/A |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|----------------------------------|------------|----------|
| A | 08.02.28 | New Issue P/O D3414-041 | KJ/DD | |
| B | 09.05.27 | Dimensions updated per Dwg Rev B | KJ | |
| C | 09.10.16 | Dwg Rev updated to Rev C | KJ | |

5A
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11

| ITEM No. | QTY. -041 | PART NUMBER | DESCRIPTION |
|----------|-----------|-------------|--------------|
| 1 | X | D3414-041 | LUG ASSEMBLY |
| 2 | 1 | D3414-1 | LUG BRACKET |
| 3 | 1 | D3414-3 | LUG |



D3414-041 LUG ASSEMBLY

SHOP COPY
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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 88027 MLS
12/07/24

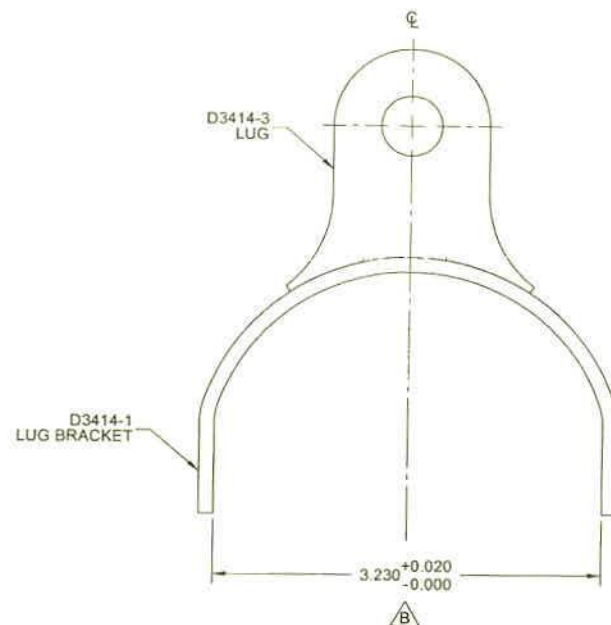
RELEASED
8/16/2017

NOTES:

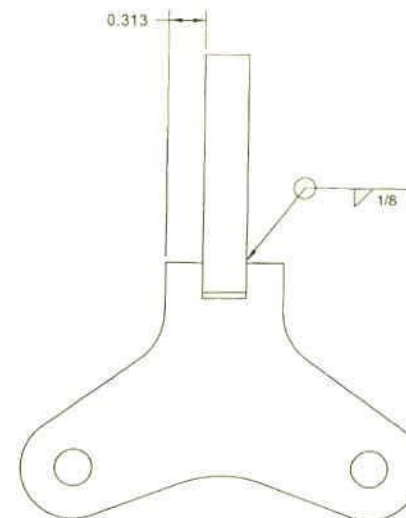
- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3414-041" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.52 lbs

| | | | |
|------------|---|--|--------------|
| C | BREAK SHARP EDGES FOR -3 NOW 0.030-0.060 WAS 0.010-0.030 (ZN A7-3) | CP | 09.06.17 |
| B | DRAWING REDRAWN IN SOLIDWORKS WITH CURRENT STANDARDS AND TRANSFERRED TO "B" SIZE BORDER. FLAT PATTERN FOR -1 INCREASED IN LENGTH TO PREVENT FOULING AT INSTL (SEE PAR198). FLAT SPOTS REMOVED FROM -1 (PART NOW "U" SHAPED) FOR EASE OF MANUFACTURE. B7-3 ADDED TOLERANCE TO 3.230 DIM. C2-3 1.12 DIM WAS 1.20. | AJS | 08.09.23 |
| A | NEW ISSUE | CP | 05.03.16 |
| REV. | DESCRIPTION | BY | DATE |
| DESIGN | CP | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| DRAWN | CP | | |
| CHECKED | J | DRAWING NO. | REV. C |
| MFG. APPR. | 12/07/24 | D3414 | SHEET 1 OF 3 |
| APPROVED | 12/07/24 | TITLE | SCALE |
| DE APPR. | 12/07/24 | LUG ASSEMBLY | NTS |
| DATE | 09.06.17 | COPYRIGHT © 2005 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL. IT IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD. | |

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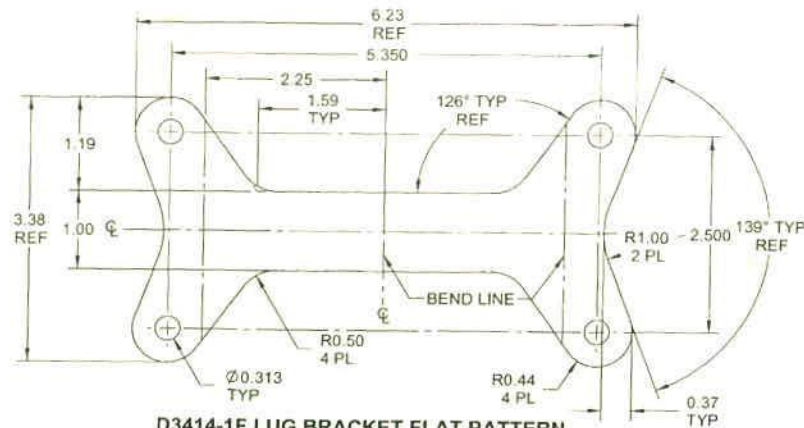


D3414-041 LUG ASSEMBLY

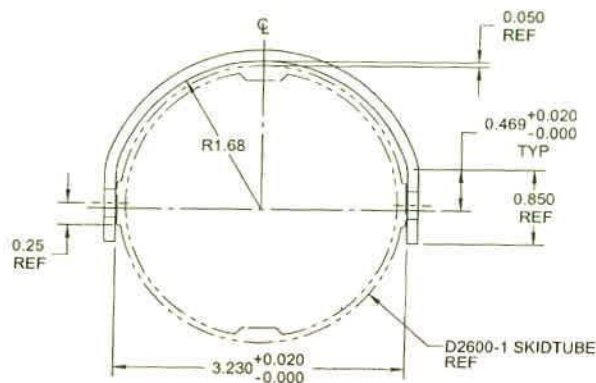


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09/06/17

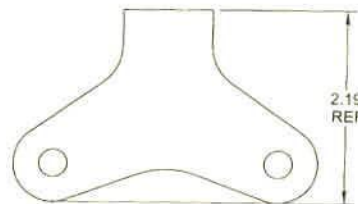
| | | | |
|------------|----------|---|--------------|
| DESIGN | CP | DART AEROSPACE LTD | |
| DRAWN | CP | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | | DRAWING NO. | REV. C |
| MFG. APPR. | | D3414 | SHEET 2 OF 3 |
| APPROVED | | TITLE | SCALE |
| DE APPR. | | LUG ASSEMBLY | NTS |
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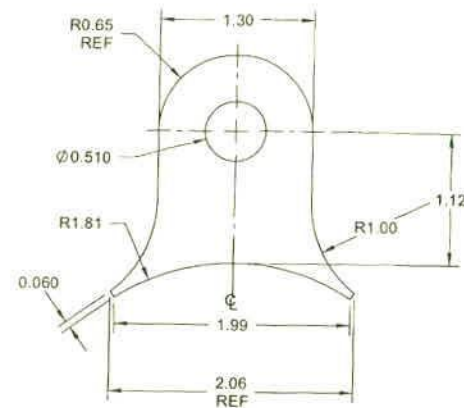
D3414-1F LUG BRACKET FLAT PATTERN



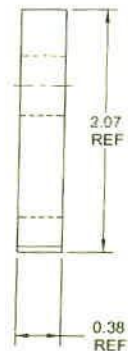
D3414-1 LUG BRACKET



SIDE VIEW FOR REF ONLY



D3414-3 LUG



NOTES:

1) MATERIAL: -1: AISI 304/316 STAINLESS STEEL SHEET, 12 GAUGE (0.100 THICK)
PER MIL-S-5059 (ANNEALED) 2B FINISH OR AMS 5513/5524
REF. DART SPEC. M304S12GA

-3: AISI 304/316 STAINLESS STEEL PLATE
PER MIL-S-5059 (ANNEALED) 2B FINISH OR AMS 5513/5524
REF. DART SPEC. M304S

2) FINISH: N/A

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: -1: 0.010 TO 0.020 MAX

-3: 0.030 TO 0.060 MAX

6) IDENTIFICATION: N/A

7) WEIGHT: N/A



RELEASED

| | | | |
|------------|----------|--|--------|
| DESIGN | QP | DART AEROSPACE LTD | |
| DRAWN | CP | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | | DRAWING NO. D3414 | REV. C |
| MFG. APPR. | | SHEET 3 OF 3 | |
| APPROVED | | TITLE | SCALE |
| DE APPR. | | LUG ASSEMBLY | NTS |
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